



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/439,550	11/12/1999	CHRISTOPHER T. GRASTEIT	ETAK-07735US	1780

23910 7590 04/08/2004

FLIESLER MEYER, LLP
FOUR EMBARCADERO CENTER
SUITE 400
SAN FRANCISCO, CA 94111

EXAMINER

COLBERT, ELLA

ART UNIT	PAPER NUMBER
----------	--------------

3624

DATE MAILED: 04/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/439,550

Applicant(s)

GRASTEIT, CHRISTOPHER T.

Examiner

Ella Colbert

Art Unit

3624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3, 4 and 6-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 4 and 6-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Claims 1, 3, 4, and 6-16 are pending. Claims 1, 3, 4, and 6-16 have been amended in this communication filed 12/27/03 entered as Amendment C, paper no. 13.
2. Applicant's 112 second paragraph rejection has been overcome by Applicant's amendment to the claims and is hereby withdrawn.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over (US 5,904,727) Prabhakaran in view of (US 6,366,851) Chojnacki et al, hereafter Chojnacki.

With respect to claim 1, Prabhakaran teaches, identifying an anchor point (col. 12, lines 26-32). Chojnacki discloses, identifying an anchor point (col. 4, lines 37-50). Prabhakaran did not teach, defining a plurality of radials extending from the anchor point and associating at least one item relating to the anchor point with each of the plurality of radials. Chojnacki discloses, defining a plurality of radials extending from the anchor point (col. 24, lines 52-67 and fig's. 21C-21D) and associating at least one item relating to the anchor point with each of the plurality of radials (col. 7, lines 19-57). However, Prabhakaran does show a radial (a line) extending from an anchor point in fig. 2 and fig. 5. Therefore, it would have been obvious to one having ordinary skill in the art

Art Unit: 3624

at the time the invention was made to define a plurality of radials extending from the anchor point and to associate at least one item relating to the anchor point with each of the plurality of radials and to modify in Prabhakaran because such a modification would allow Prabhakaran to have a method or process of programmatically assign x and y coordinates (usually no limited to earth coordinates-i.e., latitude and longitude) to records, lists and files containing location information (full addresses, partial addresses, zip codes, census FIPS codes, etc.) for cartographic or any other form of spatial analysis or reference and to have the ability to map data in order to visualize information and explore relationships previously unavailable in strict database or spreadsheet analysis.

5. Claims 3, 4, and 6-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over (US 5,904,727) Prabhakaran in view of (US 6,366,851) Chojnacki et al, hereafter Chojnacki and further in view of (US 6,101,496) Esposito.

With respect to claim 3, Prabhakaran and Chojnacki did not teach, interpolating positions on a respective radial corresponding to each of outside data matches corresponding to the respective radial and placing a marker at each interpolated of the displayed respective radial.

Esposito discloses, interpolating positions on a respective radial corresponding to each of outside data matches corresponding to the respective radial (col. 1, lines 59-67, col. 2, lines 1-45, and col. 6, lines 22-41) and placing a marker at each interpolated of the displayed respective radial (col. 5, lines 1-39 and lines 64-67, col. 6, lines 1-9, and col. 7, lines 39-53). It would have been obvious to one having ordinary skill in the art at

Art Unit: 3624

the time the invention was made to have interpolating positions on a respective radial corresponding to each of outside data matches corresponding to the respective radial and placing a marker at each interpolated of the displayed respective radial and to modify in Prabhakaran and Chojnacki because such a modification would allow Prabhakaran and Chojnack to have geocoded OI records using current technology for various precision assignments.

With respect to claim 4, Prabhakaran teaches, wherein the marker is any of a point, notch, and icon representative of information associated with each outside data match (col. 5, lines 64-67, col. 6, lines 1-24, and fig. 4(310) and fig. 5).

With respect to claim 6, Prabhakaran and Chojnack did not teach, storing the plurality of radials in a database; wherein, the identifying an anchor point; includes identifying the anchor point in the database; and associating comprises associating information in the database with the plurality of radials, the information relating to the anchor point.

Esposito discloses, storing the plurality of radials in a database (col. 6, lines 17-25 and fig. 3-1 (21 & 22); wherein, identifying an anchor point (col. 1, lines 24-35 and col. 4, lines 9-17) includes identifying the anchor point in the database (col. 3, lines 25-54) and associating comprises associating information in the database with the plurality of radials, the information relating to the anchor point (col. 8, lines 12-24). It would have been obvious to one having ordinary skill in the art at the time the invention was made to store the radials in a database; wherein, identifying an anchor point; includes identifying the anchor point in the database; and associating comprises associating

Art Unit: 3624

information in the database with the plurality of radials, the information relating to the anchor point and to modify in Prabhakaran and Chojnack because such a modification would allow Prabhakaran and Chojnack to have street side placement and other location information based on anchor points which are known, precisely geocoded records within the OI data set.

With respect to claim 7, Prabhakaran teaches, wherein the database is a geocoded database of mapping information and the items are locations within an area associated with the anchor point (col. 1, lines 50-58).

With respect to claim 8, Prabhakaran, Chojnack, and Esposito did not teach, wherein the database is a database of satellite information, the anchor point represents a position on a globe, and the items are satellites orbiting above an approximate position of the anchor point, but it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a database of satellite information, the anchor point represent a position on a globe, and the items to be satellites orbiting above an approximate position of the anchor point and to modify in Prabhakaran, Chojnack, and Esposito because such a modification would allow Prabhakaran, Chojnack, and Esposito to have a location, RF signals which contain information indicative of the location of a source of their transmission are received and processed to derive the geographic coordinates of the location and the location in a database to be associated with a mobile computer system so as to form a geocoded entry in the database.

Art Unit: 3624

With respect to claim 9, Prabhakaran, Chojnack, and Esposito did not teach, wherein each of the plurality of radials identifies at least one feature of at least one of the satellites, but it would have been obvious to one having ordinary skill in the art at the time the invention was made to have each of the plurality of radials identify at least one feature of at least one of the satellites and to modify in Prabhakaran, Chojnack, and Esposito because such a modification would allow Prabhakaran, Chojnack, and Esposito to provide the mobile computer system with current positioning information and to retrieve and to display points of interest having geocodes within a predetermined range.

With respect to claim 10, Prabhakaran and Chojnack did not teach, matching outside data to information associated with the items and displaying each radial having associated information that matches the outside data. Esposito discloses, matching outside data to information associated with the items (col. 7, lines 54-67 and col. 8, lines 1-24) and displaying each radial having associated information that matches the outside data (col. 6, lines 22-33 and col. 7, lines 39-49). It would have been obvious to one having ordinary skill in the art at the time the invention was made to match outside data to information associated with the items and display each radial having associated information that matches the outside data and to modify in Prabhakaran and Chojnack because such a modification would allow Prabhakaran and Chojnack to have the database default to the ZIP centroid with the addresses matching the assigned point.

With respect to claim 11, Prabhakaran teaches, wherein the outside data is location information of data stored in the database (col. 5, lines 36-43).

Art Unit: 3624

With respect to claim 12, Prabhakaran teaches, assigning a direction to each respective radial (col. 7, lines 60-67 and col. 8, lines 1-4).

Prabhakaran and Chojnack did not teach, calculating an endpoint for each respective radial, defining each respective radial from the centroid to its endpoint. Esposito discloses, calculating an endpoint for each respective radial, defining each respective radial from the centroid to its endpoint (col. 7, lines 39-67, col.8, lines 1-20 and lines 29-40, and fig. 5). It would have been obvious to one having ordinary skill in the art at the time the invention was made to calculate an endpoint for each respective radial, defining each respective radial from the centroid to its endpoint and to modify in Prabhakaran and Chojnack because such a modification would allow Prabhakaran and Chojnack to have the number of pinpointed x,y (z) addresses in the geocoding georeferenced library with the ability to interpolate from the addresses near or the exact street containing the vector of the address ranges.

With respect to claim 13, Prabhakaran teaches, assigning a direction to each respective radial based on at least one or information and features of the item associated with the respective radial (col. 13, lines 7-22 and lines 34-54).

With respect to claim 14, Prabhakaran, Chojnack, and Esposito did not teach, wherein the information and features is at least one of a margin of error with which the anchor point identifies a location corresponding to the item, facilities, including any one of parking, food, and communications associated with the item, and any other information or features related to the item, but it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the information and

Art Unit: 3624

features to be at least one of a margin of error with which the anchor point identifies a location corresponding to the item, facilities, including any one of parking, food, and communications associated with the item, and any other information or features related to the item and to modify in Prabhakaran, Chojnack, and Esposito because such a modification would allow Prabhakaran, Chojnack, and Esposito to have at least one margin of error where the anchor point identifies a location corresponding to an item, facilities, including parking, food, and communications associated with an item because in a geocoded database the act, method or processes of programmatically assigning x and y coordinates to records, lists and files containing location information for cartographic or any other form of spatial analysis or reference particularly mapping data is well known for being subject to a margin of error.

With respect to claim 15, Prabhakaran and Chojnack did not teach, wherein the anchor point is a centroid and each item is a location within an area associated with the centroid. Esposito discloses, wherein the anchor point is a centroid and each item is a location within an area associated with the centroid (col. 2, lines 35-45, col. 4, lines 14-17, and col. 8, lines 29-34). It would have been obvious to one having skill in the art at the time the invention was made to have the anchor point as a centroid and each item is a location within an area associated with the centroid and to modify in Prabhakaran and Chojnack because such a modification would allow Prabhakaran and Chojnack to have ZIP+4 centroids as a specific street level address in a raw data record. A centroid by definition is "a two-dimensional figure or three dimensional solid. Thus the centroid of a two-dimensional figure represents the point at which it could be cut out of, for

Art Unit: 3624

example sheet metal. The centroid circle or sphere is its cen generally, the centroid represents the point designated by the mean of the coordinates of all the points in a set" (see enclosed Britannica Concise Encyclopedia reference).

With respect to claim 16, Prabhakaran and Chojnack did not teach, wherein each radial identifies a location within an area of the centroid and a proximity of the location to the centroid. Esposito discloses, wherein each radial identifies a location within an area of the centroid and a proximity of the location to the centroid (col. 3, lines 48-50 and lines 55-66 and col. 7, lines 29-33). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have each radial identify a location within an area of the centroid and a proximity of the location to the centroid and to modify in Prabhakaran and Chojnack because such a modification would allow Prabhakaran and Chojnack to have ZIP+4 centroids as a specific street level address in a raw data record. A centroid by definition is "a two-dimensional figure or three dimensional solid. Thus the centroid of a two-dimensional figure represents the point at which it could be cut out of, for example sheet metal. The centroid circle or sphere is its cen generally, the centroid represents the point designated by the mean of the coordinates of all the points in a set" (see enclosed Britannica Concise Encyclopedia reference).

Response to Arguments

6. Applicant's arguments filed 12/27/03 with respect to claims 1, 3, 4, and 6-16 have been fully considered but they are not persuasive. The Examiner considers the following arguments to be the main issues as addressed here below.

Art Unit: 3624

Issue no. 1: Applicant argues: Prhabhakaran does not disclose defining a plurality of radials and associating at least one item relating to said anchor point with each of said plurality of radials and Chojnakci does not disclose, hint or suggest these elements. Response: Applicant's argument has been considered but is not persuasive because Applicant is arguing the amendment to claim 1. Therefore, this argument is considered to be "moot".

Issue no. 2: Applicant argues: Applicant respectfully disagrees with Examiner's characterization of Esposito. Response: The Examiner disagrees with the Applicant because Esposito was not used to reject any of the limitations of claim 1. Esposito was used to reject the claim limitations of claims 3, 6, 10, 12, 15, and 16. Therefore, this argument is considered "moot".

Issue no. 3: Applicant argues: Applicant further submits that it would not be obvious to have a margin of error in the cited references as stated by the Examiner.

Response: In response to Applicant's argument that it would not be obvious to have a margin of error in the cited references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the information and features to be at

Art Unit: 3624

least one of a margin of error with which the anchor point identifies a location corresponding to the item, facilities, including any one of parking, food, and communications associated with the item, and any other information or features related to the item and to modify in Prabhakaran, Chojnack, and Esposito because such a modification would allow Prabhakaran, Chojnack, and Esposito to have at least one margin of error where the anchor point identifies a location corresponding to an item, facilities, including parking, food, and communications associated with an item because in a geocoded database the act, method or processes of programmatically assigning x and y coordinates to records, lists and files containing location information for cartographic or any other form of spatial analysis or reference particularly mapping data is well known for being subject to a margin of error.

Conclusion: In this rejection of claims 1, 3, 4, and 6-16, under Section 103(a) of Title 35 of the United States Code, the Examiner carefully drew up a correspondence between each of Applicant's claimed limitations, what is well known in the art, what is obvious to one having ordinary skill in the art (the skilled artisan), and one or more referenced passages in Prabhakaran, Chojnacki, and Esposito. The Examiner is entitled to give claim limitations their broadest reasonable interpretation in light of the Specification (see below):

2111 Claim Interpretation; Broadest Reasonable Interpretation [R-1]

>CLAIMS MUST BE GIVEN THEIR BROADEST REASONABLE INTERPRETATION

During patent examination, the pending claims must be "given the broadest reasonable interpretation consistent with the specification." Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the

Art Unit: 3624

examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 162 USPO 541,550-51 (CCA 1969).<

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Inquiries

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ella Colbert whose telephone number is 703-308-7064. The examiner can normally be reached on Monday-Thursday from 6:30 am -5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent Millin can be reached on 703-308-1038. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3624

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


E. Colbert
March 29, 2003



VINCENT MILLIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600